

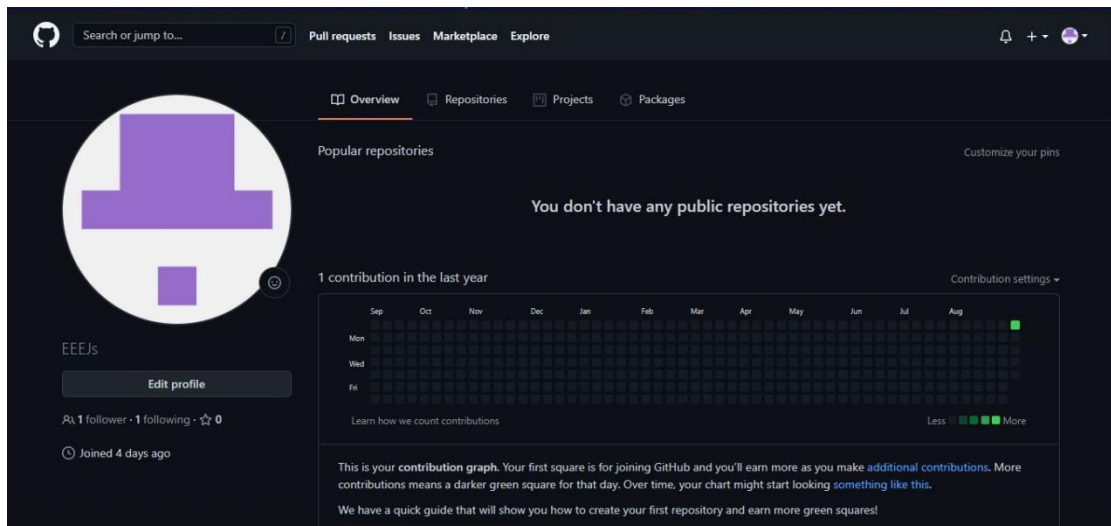
EEE307_TUTORIAL 1

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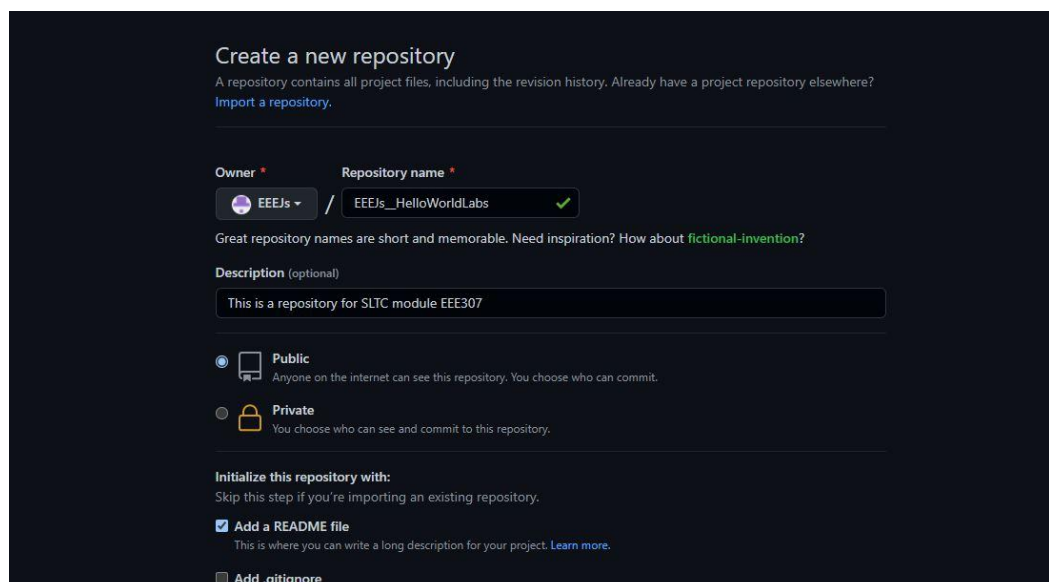
1.1 FAMILIARIZING WITH GITHUB

- Step 1 : Create your github account
 - Visit www.github.com
 - Create your account with a good username as you may need to use it in your future work

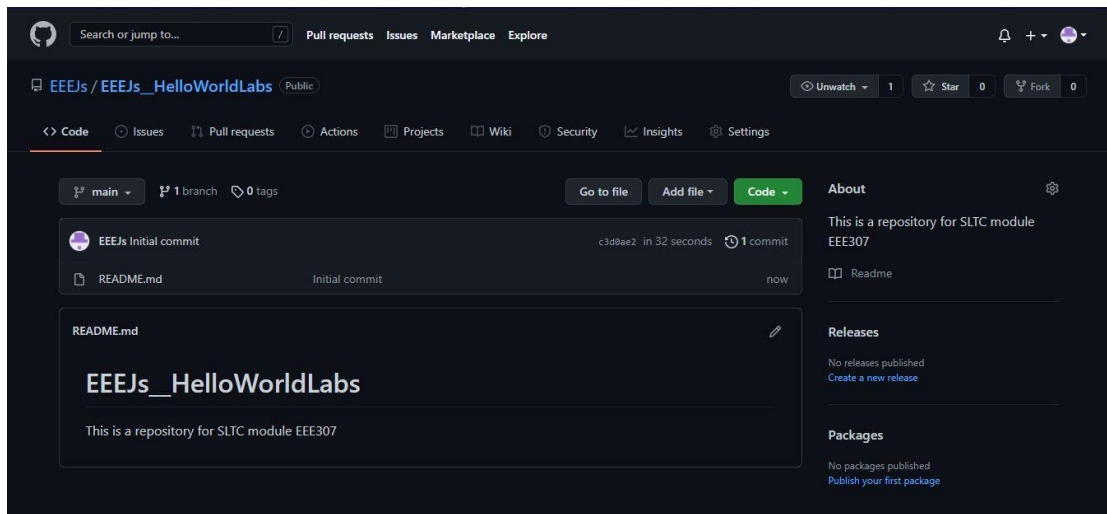
Profile URL : <https://github.com/EEEJs>



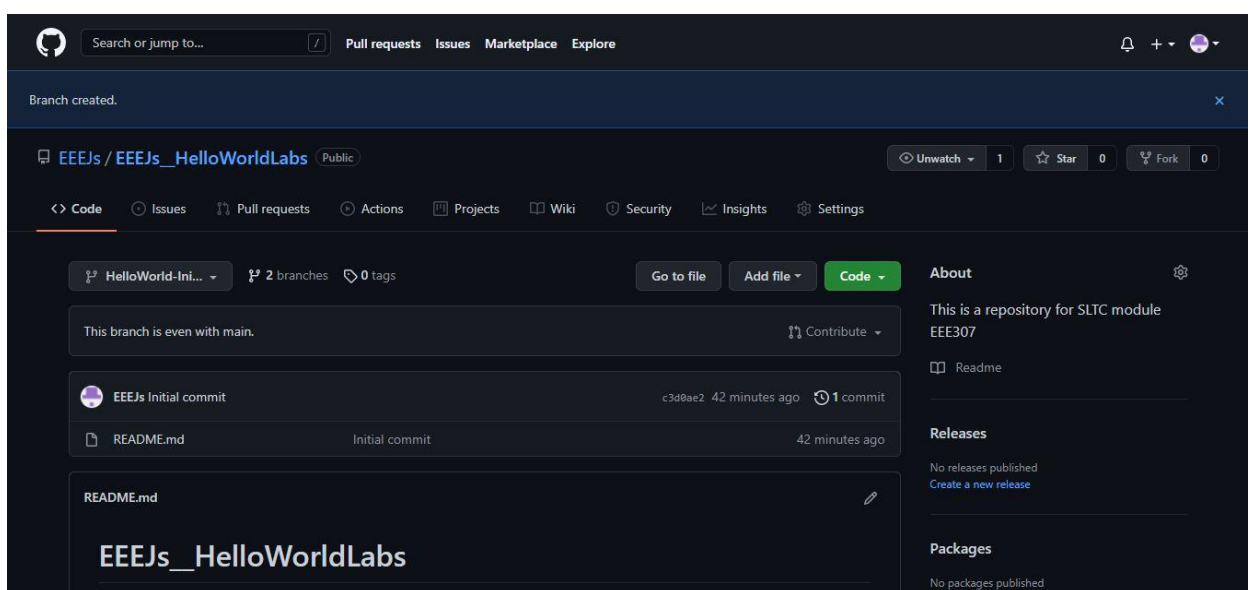
- Step 2 : Create a repository
 - A repository is used to host a single project which can contain any type of data including folders.
 - Login to your github.com page
 - By selecting '+' and New repository
 - Name of the repository “YourFirstName_HelloWorldLabs”, Use a meaningful name with no spaces
 - Add a short description. Try to describe the project in short
 - Select “Initialize this repository with a README”



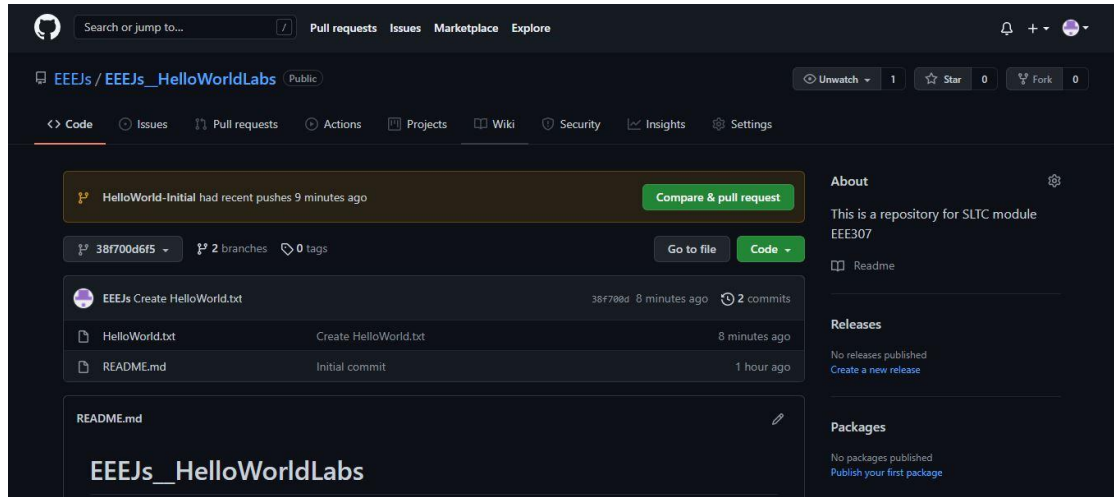
- Click create repository



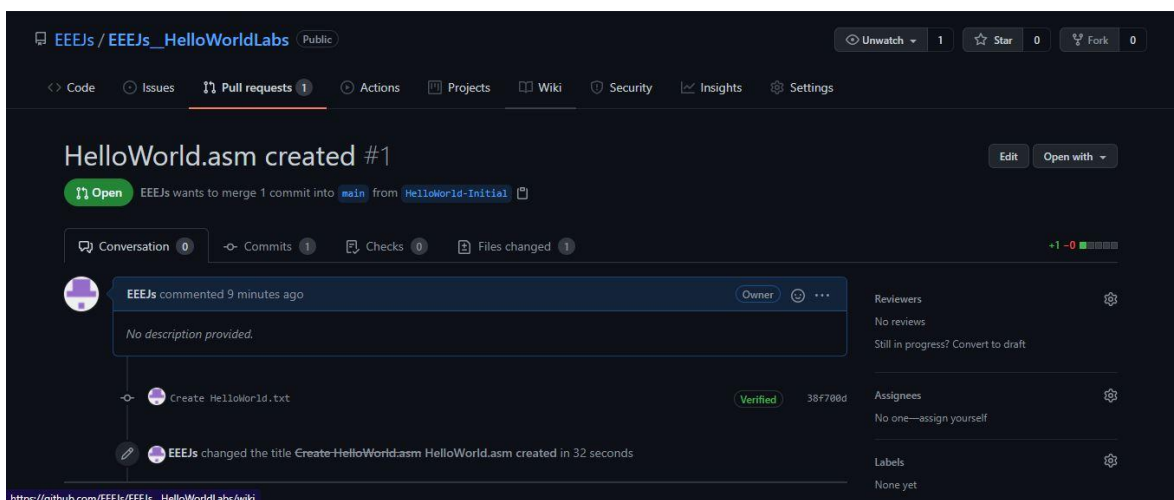
- Step 3: Branching
 - This is the way to work on different versions of a project.
 - The master branch is considered to be the working project which can be branched, edited and tested before committing back to the master branch. In this way master branch contains a working set of design files all the time. Your branch is independent from someone else's. Therefore it is possible to work simultaneously in developing different features of the same project.
 - Create a new branch named "HelloWorld-Initial"
 - Now we have two branches named "master " and "HelloWorld-Initial"



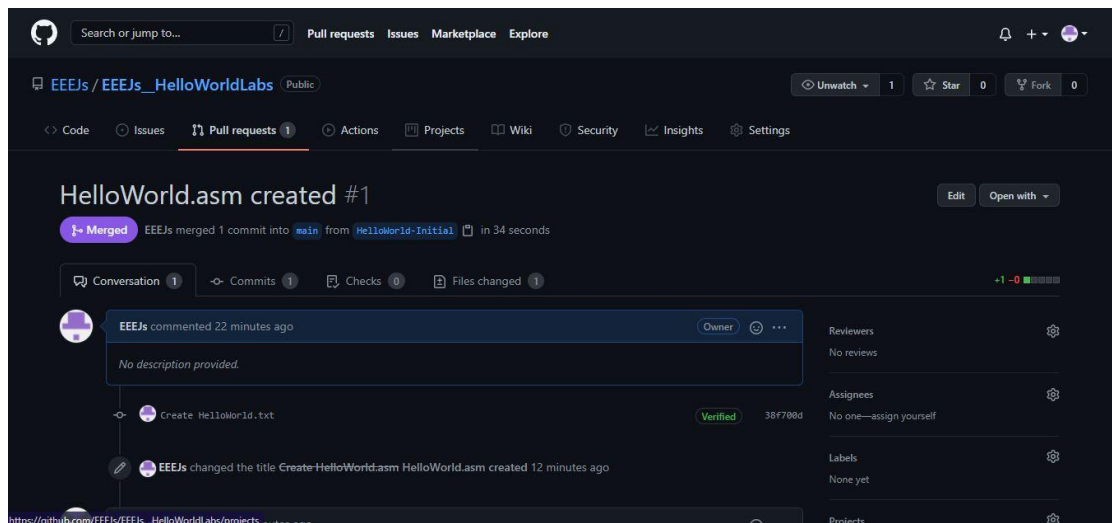
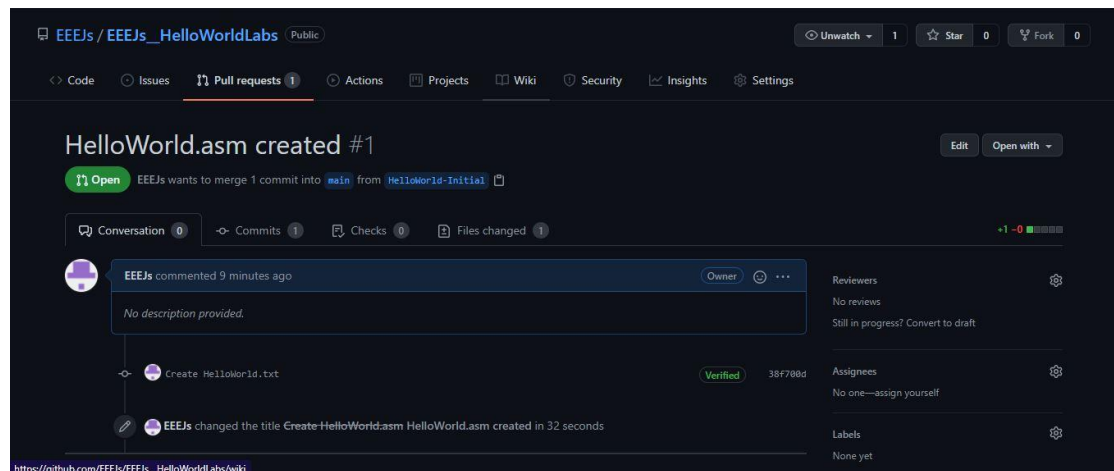
- Step 4: Commit changes
 - Now you can start editing the files in your branch
 - Add a new file named “HelloWorld.txt”
 - Write some text in the “HelloWorld.txt”
 - Then click “Commit changes”



- Step 5: Open a pull request
 - Using pull requests, you can ask someone to review your contributions before merge them to the master branch or some other branch.
 - It is possible open a pull request as soon as you make a commit.
 - You can use “mention” system to ask someone to give feedback
 - It is possible to open up pull requests yourself and merge them yourself.
 - Create a pull request and give it the title “HelloWorld.asm created”



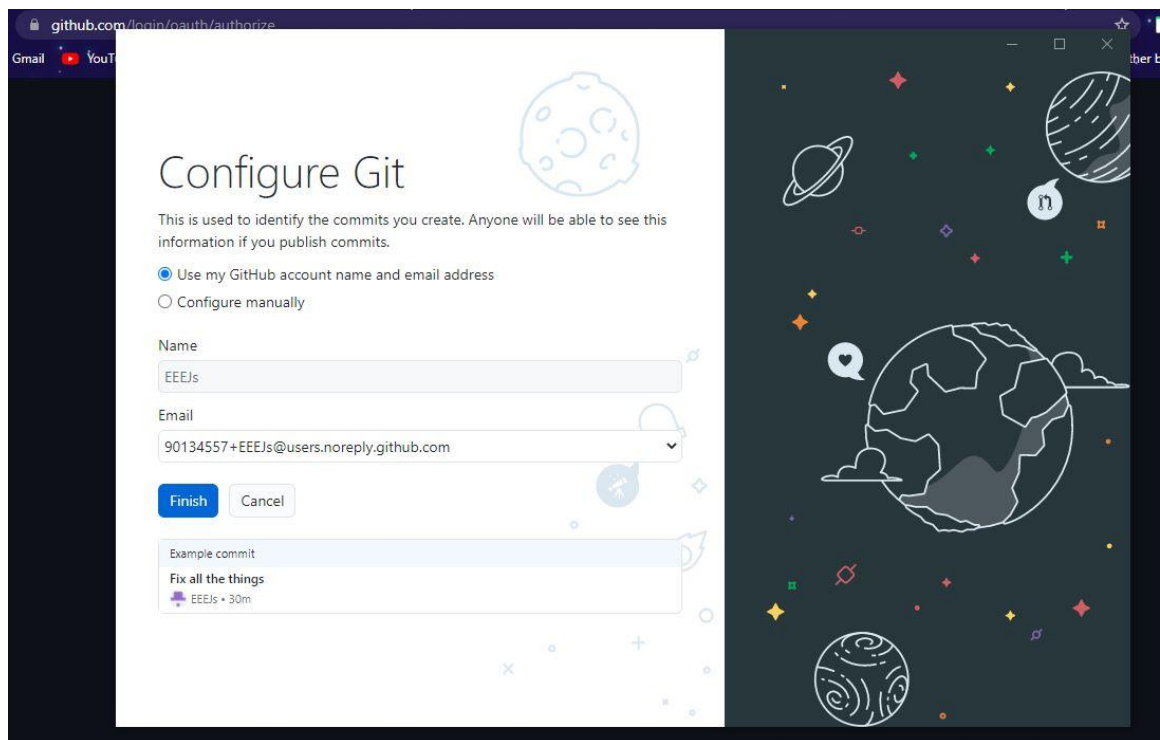
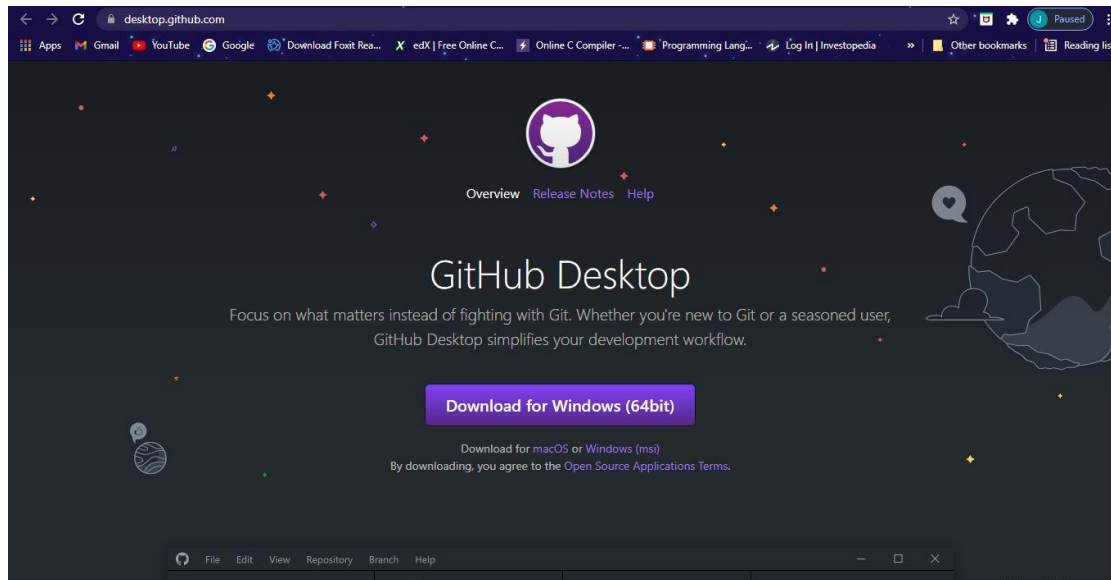
- Step 6: Merge the pull request
 - Once you finish testing your branch it can be merged to the master branch
 - It shows if there are any conflicts of the edited files. If two users edit the same file from two locations, there can be conflicts.
 - Click Merge pull request and confirm the merge
 - You can delete the branch as the changes are already incorporated.

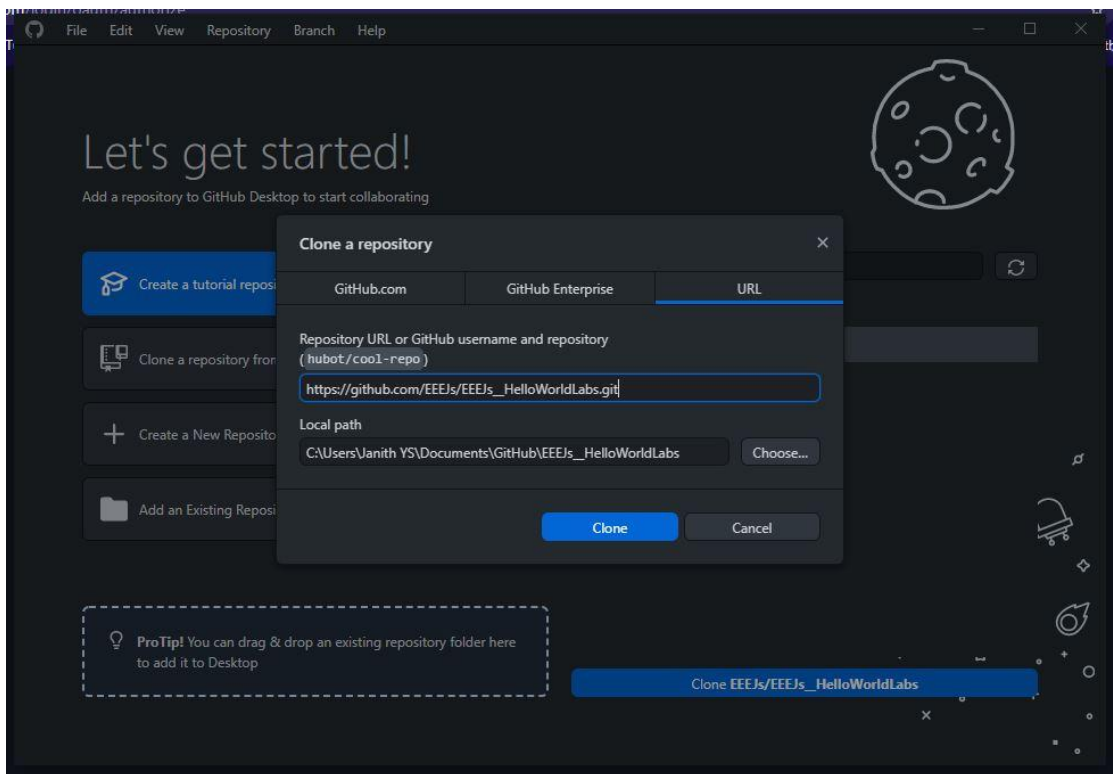
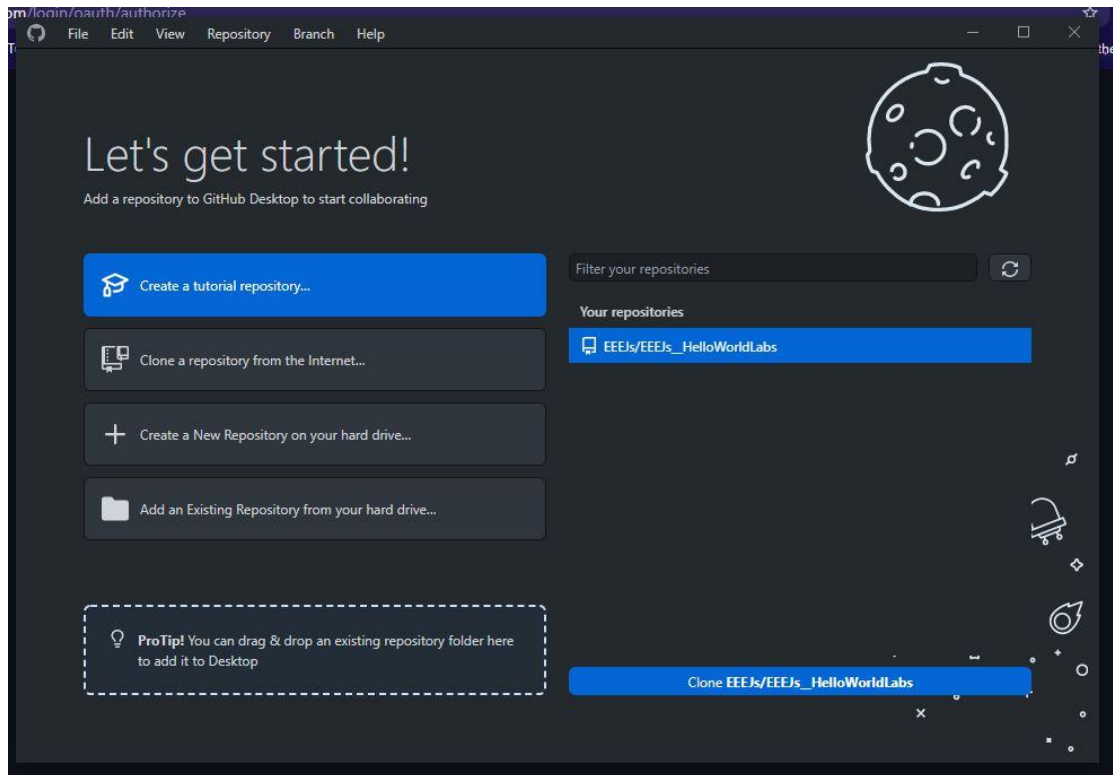


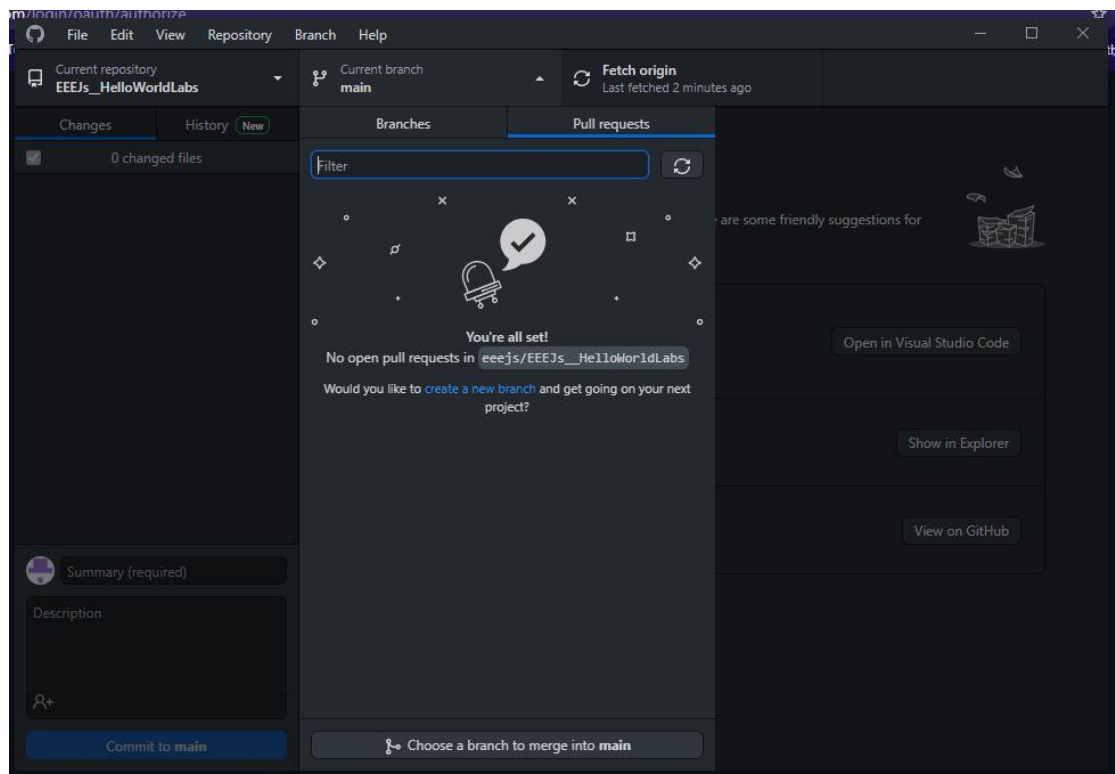
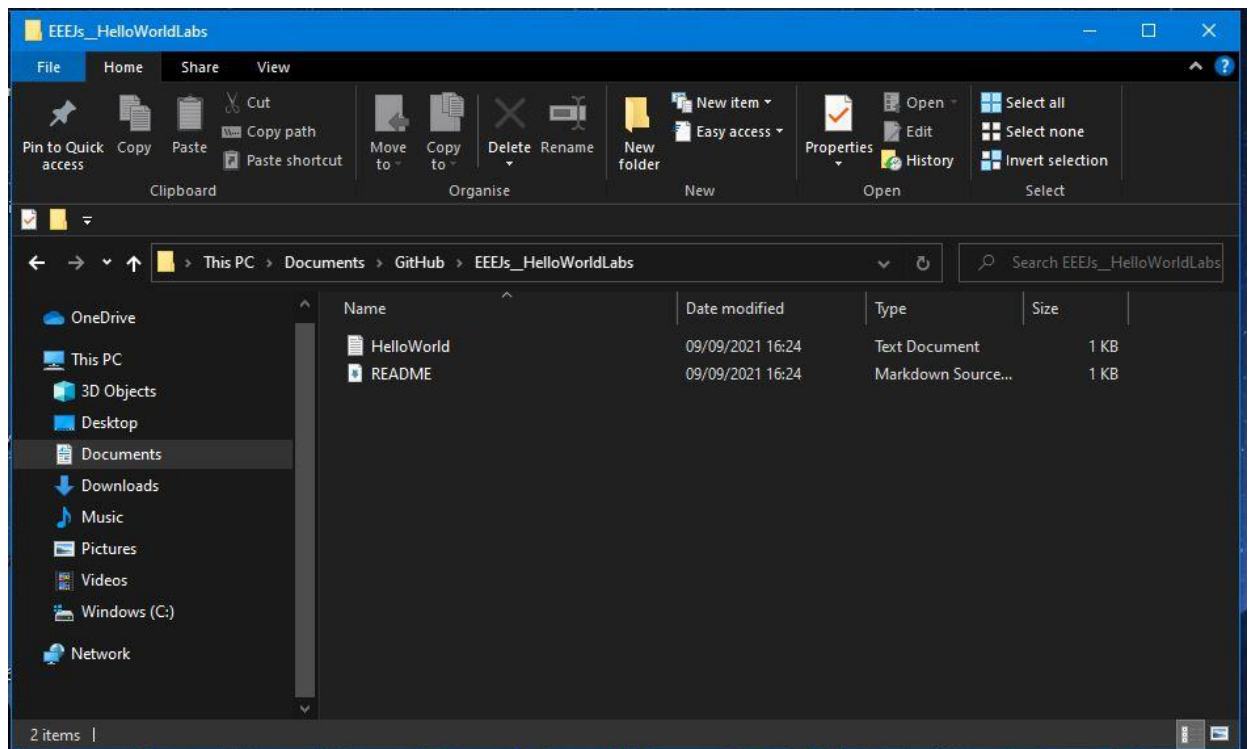
1.2 GITHUB GUI

You can manage your codes locally with the help of command line arguments or with the Github GUI. Following instructions are to setup the Github GUI in your computer.

- Step 1 : Installing Github desktop
 - <https://desktop.github.com/> download and install Github desktop from here
 - Login using your Github account login details



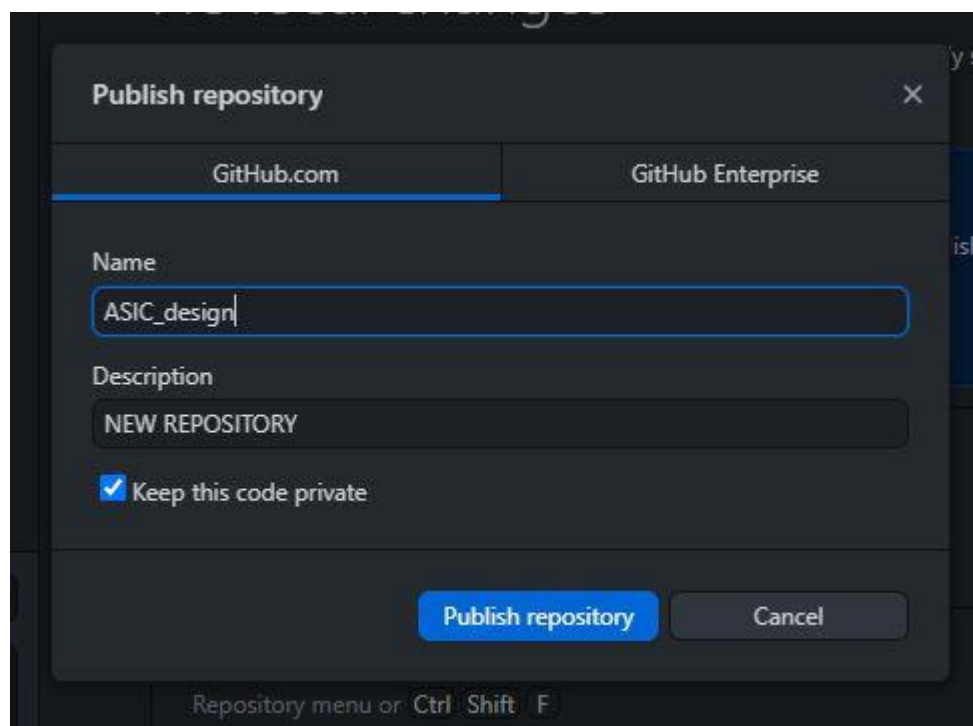
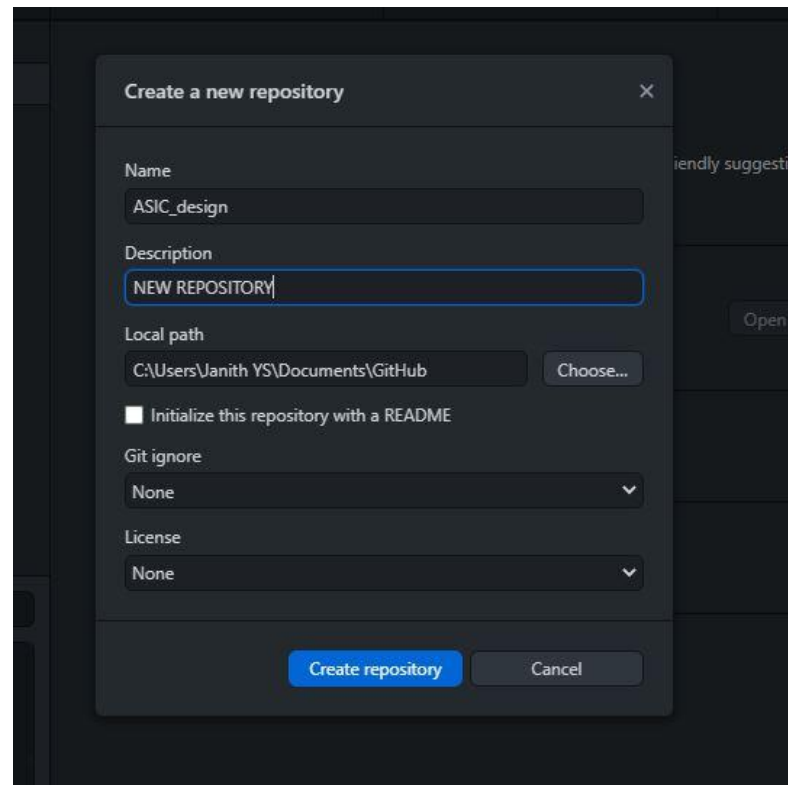


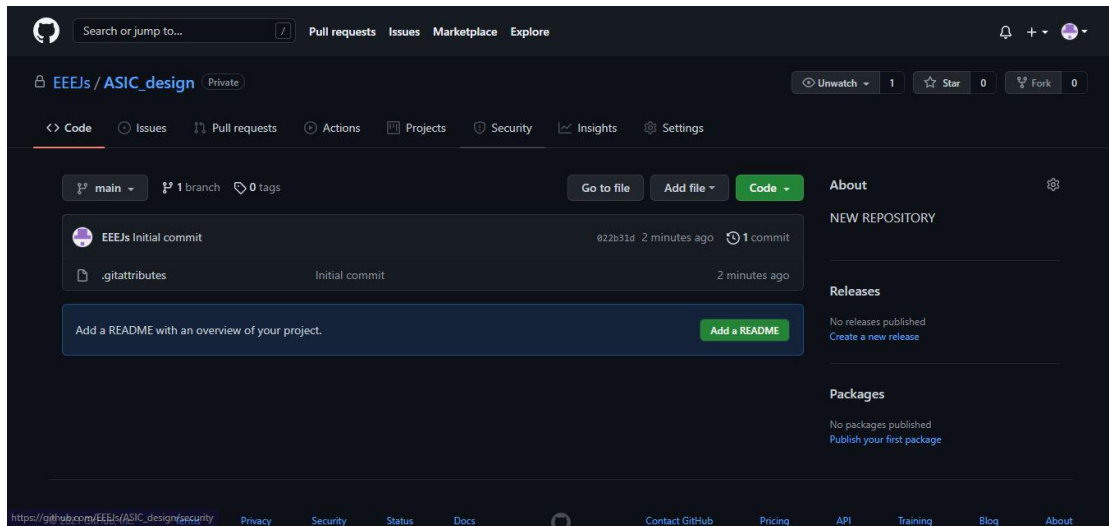


1.3 COLLABORATION

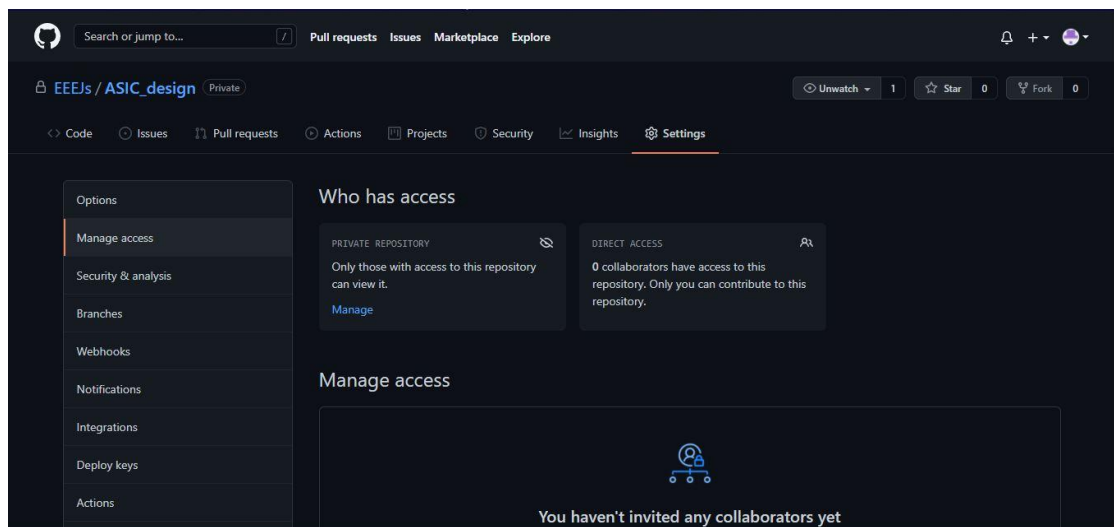
Main advantage of Git repo is the possibility of working simultaneously on different parts of a project. Follow the steps to create your own repo to be shared between team members.

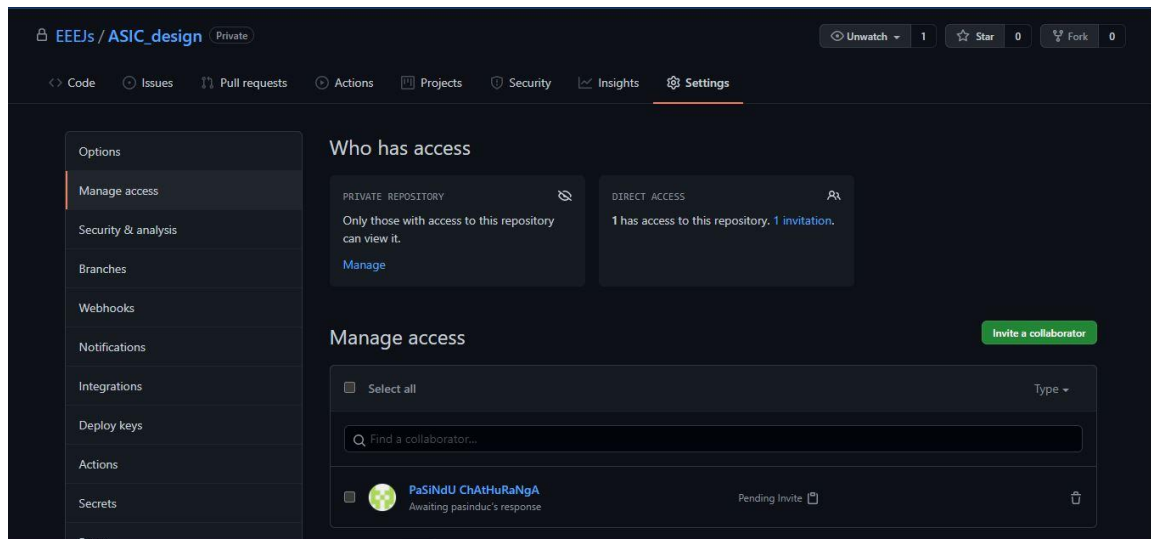
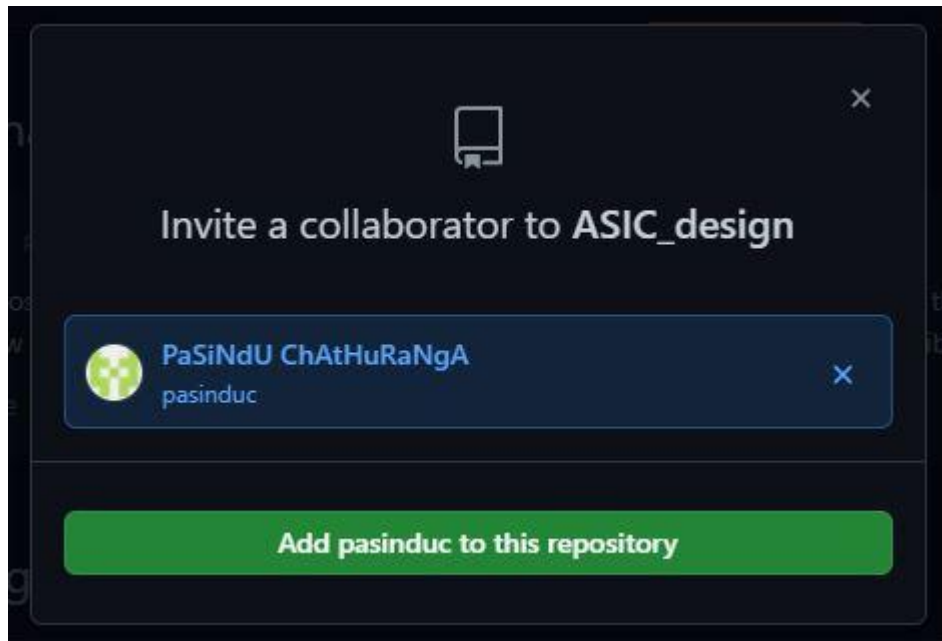
- Step 1: Creation of new repository
 - Create a public repo for your group project
 - Use a shortened name as the repository name
 - Create this repository without any files by the group leader





- Step 2: Collaboration
 - Now under the created repo goto Settings and select Manage access from the left sidebar
 - Now under Invite a collaborator, add your team members.
 - Send the copied invitation link from the icon next to pending invite to your team members.
 - Team members can now accept the invitation to collaborate for the project





- Step 3: Project setup
 - Please make sure to create a branch from the master. NEVR MAKE CHANGES TO THE MASTER.
 - Distribute different possible modules among team members. Eg: 4:1 mux, 4-bit adder...etc.
 - Create a branch with a title like "SubProjectName-‘yourfirstname’", like that create different branch among team members
 - Now create the folder structure for your chosen module. Module name is preferred to be short yet descriptive.
 - Create some text files inside the folders.

